

1. (Currently Amended) UV-protection composition comprising:  
solid, polymorphic lipid particles that are crystalline or partially crystalline ~~and have a size below 5  $\mu$ m (average value of the main population)~~, optionally in the form of a solid inner phase (lipid phase) dispersed in an outer liquid phase, wherein the solid polymorphic particles have an endothermic peak above 20°C during the heating-up phase in heat calorimetry (DSC - differential scanning calorimetry) and have a size (average value of the main population) in the range of 10 nm to 1000 nm, and wherein the polymorphic particles comprise at least one selected from the group consisting of natural and synthetic mono-, di- und triglycerides, their mixtures, fatty alcohols, ethers of the same, individually or in a mixture, cetyl palmitate, glycerol monostearate, glycerol palmitostearate, glycerol ricinoleate, glycerol tribehenate (Compritol), gly-cerol trilaurate, hard fat (Witepsols), microcrystalline triglycerides (Dynasanes), and stearyl alcohol, individually or in a mixture.
2. (Cancelled).
3. (Previously Presented) Composition according to claim 1, further comprising one or more molecular and/or particulate UV blockers which are dissolved and/or dispersed in lipid the matrix material and/or adsorbed at the surface of the lipid particles.
4. (Previously Presented) Composition according to claim 3, comprising as particulate UV blocker one or more inorganic pigments or organic pigments which is/are dispersed in the lipid matrix and/or is/are added to the surface of the lipid particles.
5. (Previously Presented) Composition according to claim 4, wherein the pigment comprises at least one selected from the group consisting of barium sulphate, bentonite, calcium carbonate, calcium sulphate, ferric(III) oxides,

ferric hydroxide, kaolin, carbon black, copper oxide, magnesium oxide, silver, silicon dioxide, Aerosil, Syloid, hydrophobic alkylated silicon dioxide, Aerosil R972, talcum, titanium dioxide, bismuth oxychloride, zinc oxide, zinc stearate and melanin, individually or in a mixture.

6. (Previously Presented) Composition according to claim 1, further comprising one or more antioxidative substances, individually or in a mixture, which are dissolved and/or dispersed and/or absorbed in the lipid matrix and/or adsorbed at the surface of the lipid particles.
7. (Previously Presented) Composition according to claim 6, wherein the antioxidative substance comprises at least one selected from the group consisting of retinol, retinol derivatives, retinol palmitate, retinol acetate, vitamin E, vitamin E derivatives, vitamin E acetate, vitamin E linoleate, vitamin E nicotinate, vitamin E palmitate, vitamin E-POE (22) succinate, vitamin C, vitamin C derivatives, vitamin C palmitate, magnesium ascorbate, magnesium phosphate, aescine, butylhydroxyanisole (BHA), butylhydroxytoluene (BHT), cysteine, dilaurylthiodipropionate, dodecylgallate, caffeic acid, liponic acid and derivatives, propylgallate, flavonoid, rutin, a derivative of rutin, quercetin, a derivative of quercetin, and tanning agents, individually or in a mixture.
8. (Previously Presented) Composition according to claim 1, further comprising at least one skin-care substance and/or moisturizing substance which is dissolved and/or dispersed in the lipid matrix and/or are adsorbed at the surface of the lipid particles.
9. (Previously Presented) Composition according to claim 8, wherein the skin-care substance and/or moisturizing substance comprises at least one selected from the group consisting of, amino acid derivatives, arginine pyroglutamate, glutamic acid, lysine pyroglutamate, glucose, glycerol,

urea, mucopolysaccharide, hyaluronic acid, sodium lactate, sodium pyrrolidone carboxylic acid, propylene glycol, vitamin A, retinols, a derivative of retinol, polysaccharides, uronic acids, saccharose glutamate, allantoin, biotin, bisabolol, cholesterol, collagen, a derivative of collagen, elastin, glycoproteins, hyaluronic acid, a derivative of hyaluronic acid, keratin, a derivative of keratin, lecithin, linoleic acid, linolenic acid, milk proteins, niacinamide, panthenol, a derivative of panthenol, riboflavin, sulphur, urea, soybean oil, tocopherol, and a derivative of tocopherol, individually or in a mixture.

10. (Previously Presented) Composition according to claim 1, further comprising at least one natural, synthetic, or semi-synthetic scents, individually or in a mixture, which are dissolved and/or dispersed in the lipid matrix and/or adsorbed at the surface of the lipid particles.
11. (Previously Presented) Composition according to claim 10, wherein the natural, synthetic or semi-synthetic scent comprises at least one selected from the group consisting of ethereal oils , perfumes, pheromones and repellents.
12. (Previously Presented) Composition according to claim 11, comprising at least one ethereal oil selected from the group consisting of lemon oil, rose oil, lavender oil, bergamot oil, balm mint oil, clove oil, cinnamon oil, orange oil, jasmine oil, rosemary oil, aniseed oil, peppermint oil, sandalwood oil, ylang-ylang oil, ylang-ylang oil isolated ingredients, 1,8-cineole, menthol, terpinol hydrate, limonene,  $\alpha$ -pinene and eugenol.
13. (Previously Presented) Composition according to claim 11, comprising at least one perfume selected from the group consisting of Allure, Coco, Egoiste, Chanel No. 5, 19, 22 from Chanel, Miss Dior, Dune, Diorissime or Fahrenheit from Dior, Roma, Laura, Venezia from Laura Biagotti, L'air du

temps from Nina Ricci, Chalimar from Guerlain, Tresor from Lancome, Gio from Armani, Escape, Obsession, CK One, CK be, Eternity from Calvin Klein, Berlin, Joop, Rococo, All about Eve, What about Adam, Nightflight from Joop, KL, Lagerfeld, Jako from Karl Lagerfeld and Extreme from Bulgari.

14. (Previously Presented) Composition according to claim 11, comprising at least one repellent selected from the group consisting of natural repellents, citrus oils, eucalyptus oil, camphor, synthetic repellents, N,N-diethyl-toluamide (DEET), dibutyl phthalate, dimethyl phthalate and 2-ethyl-1,3-hexandiol.
15. (Previously Presented) Composition according to claim 1, wherein the lipid particles comprise lipids/lipoids that are solid at room temperature (20°C).
16. (Previously Presented) Composition according to claim 1, wherein the lipid particles comprise at least one lipid solid at room temperature (20°C), to which at least one lipid liquid at room temperature is added to produce a lipid mixture.
17. (Previously Presented) Composition according to claim 16, wherein the liquid lipid comprises at least one selected from the group consisting of medium chain triglycerides (MCTs), Miglyol, Miglyol 812, Miglyol 810, Miglyol 840, long chain triglycerides (LCTs), isopropyl myristate, vegetable oils, avocado oil, cotton-seed oil, safflower oil, peanut oil, jojoba oil, coconut oil, linseed oil, walnut oil, olive oil, palm-kernel oil, sesame oil, wheatgerm oil, animal oils, cod-liver oil, halibut-liver oil, and neat's foot oil, individually or in a mixture.
18. (Previously Presented) Composition according to claim 1, wherein the lipid particles were produced by grinding.
19. (Previously Presented) Composition according to claim 1, wherein the lipid particles were produced by dispersing the lipid in an outer liquid phase, the

lipid being in the solid and/or liquid state.

20. (Previously Presented) Composition according to claim 19, wherein the lipid has been dispersed in an outer phase below its melting point.
21. (Previously Presented) Composition according to claim 19, wherein the lipid has been dispersed in an outer phase close to or above its melting point.
22. (Previously Presented) Composition according to claim 1, wherein the lipid particles are dispersed in the outer liquid phase and are stabilized by surfactants, polymers or antiflocculants and/or a stabilization against particle aggregation has been effected by increasing the viscosity of the liquid phase by adding viscosity-increasing substances.
23. (Previously Presented) Composition according to claim 22, comprising at least one surfactant selected from the group consisting of sorbitan fatty acid esters, Tween, Tween 80, Span, Span 85, sugar esters, saccharose stearate, saccharose distearate, saccharose laurate, saccharose octanoate, saccharose palmitate, saccharose myristate, fatty alcohols, cetylstearyl alcohol, sodium cetylstearyl sulphate, cocoamidopropylbetain (Tego Betain L7FG), sodium cocoamphoacetate (Miranol Ultra 32), polyglycerol methylglucose distearate (Tego Care 450), lecithins, soybean lecithin or egg lecithin, alkaline soaps, metal soaps, calcium dilaurate, natural surfactants, and saponins, individually or in a mixture.
24. (Previously Presented) Composition according to claim 22, comprising at least one polymer selected from the group consisting of block polymers, poloxamers, Poloxamer 188, Poloxamer 407, polyvinyl derivatives, polyvinyl acetate, polyvinyl alcohol, polyvinyl pyrrolidone, and polystyrenes, individually or in a mixture.

25. (Previously Presented) Composition according to claim 22, comprising at least one antiflocculant selected from the group consisting of sodium citrate, sodium pyrophosphate and sodium sorbate individually or in a mixture.
26. (Previously Presented) Composition according to claim 22, comprising at least one viscosity-increasing substance selected from the group consisting of cellulose derivatives, carboxymethyl cellulose, cellulose acetate phthalate, hydroxyethyl cellulose, methyl cellulose, methylhydroxyethyl cellulose, methylhydroxypropyl cellulose, polyacrylates, polyacrylic acids, polyvinyl derivatives, alginates, bentonite, highly-dispersed silicon dioxide (Aerosil), pectins, tragacanth and xanthan, individually or in a mixture.
27. (Previously Presented) Composition according to claim 1, wherein the outer phase of the dispersion further comprises at least one additional UV blocking substance and/or UV blocking particle.
28. (Previously Presented) Composition according to claim 1, wherein it is present in the form of a formulation for application on skin and mucous membranes.
29. (Previously Presented) Composition according to claim 1, wherein it is present in the form of a formulation for application on hair or scalp.
30. (Currently Amended) Method for protecting skin, mucous membranes, hair or scalp against health-damaging UV radiation and strengthening the natural skin barrier comprising applying a UV radiation-absorbing and/or reflecting composition to the skin, mucous membranes, hair or scalp, wherein the composition comprises solid, polymorphic lipid particles which are crystalline or partially crystalline ~~and have a size below 5  $\mu$ m (average value of the main population)~~, optionally in the form of a solid inner phase (lipid phase) dispersed in an outer liquid phase, and wherein the solid polymorphic particles have an endothermic peak above 20°C during the heating-up phase

in heat calorimetry (DSC - differential scanning calorimetry) and have a size (average value of the main population) in the range of 10 nm to 1000 nm, and wherein the polymorphic particles comprise at least one selected from the group consisting of natural and synthetic mono-, di- und triglycerides, their mixtures, fatty alcohols, ethers of the same, individually or in a mixture, cetyl palmitate, glycerol monostearate, glycerol palmitostearate, glycerol ricinoleate, glycerol tribehenate (Compritol), gly-cerol trilaurate, hard fat (Witepsols), microcrystalline triglycerides (Dynasanes), and stearyl alcohol, individually or in a mixture.

31. (Previously Presented) Method according to claim 30, wherein the particles dispersed in an outer phase are applied directly as a dispersion onto the skin or mucous membranes.
32. (Cancelled)
33. (Previously Presented) Composition according to claim 3, comprising at least one molecular UV blocker selected from the group consisting of benzophenone and its derivatives, 4-phenylbenzophenone, 2-hydroxy-4-n-octyloxy-benzophenone, 2-hydroxy-4-methoxy-benzophe-none, 2,2'-dihydroxy-4,4'-dimethoxybenzophenone, suliso-benzene, benzimidazole derivatives, phenyl-benzimidazole sulfonic acid, camphor derivatives, 3-benzylidenecamphor, 3-(4-methylbenzylidene)-camphor, terephthalylidenedicamphor sulfonic acid, dibenzoylmethanes, 4-isopropyl-dibenzoyl-methane, 4-tert.-butyl-4'-methoxy-dibenzoylmethane, cinnamic acid esters, p-methoxycinnamic acid-2-ethylhexyl ester, p-methoxy-cinnamic acid isoamyl ester, p-methoxycinnamic acid octyl ester, p-methoxycinnamic acid propyl ester, p-aminobenzoic acid (PABA) and its derivatives, p-aminobenzoic acid glycerol ester, butyl-PABA, octyl-dimethyl-PABA, 2-ethylhexyl salicylate, homosalate, Mexoryl7 SX, Mexoryl7 XL, octylsalicylate, octyltriazone, and oxybenzone.

34. (Canceled).
35. (Previously Presented) Composition according to claim 18, wherein the grinding comprises using at least one selected from the group consisting of ball milling, mortar milling and air-jet milling.
36. (Previously Presented) Composition according to claim 20, wherein the lipid has been dispersed in an outer phase below its melting point using at least one selected from the group consisting of a rotor-stator colloid mill, a high-speed mixer, a dissolver disk, a high pressure homogenizer, a piston-gap homogenizer, and a Microfluidizer.
37. (Previously Presented) Composition according to claim 21, wherein the lipid has been dispersed in an outer phase close to or above its melting point using at least one selected from the group consisting of a rotor-stator colloid mill, a high-speed mixer, an Ultra-Turrax, Silverson mixer, a dissolver disc, a microscale or macroscale static mixer, a high pressure homogenizer, a piston-gap homogenizer and a Microfluidizer.
38. (Previously Presented) Composition according to claim 27, wherein the additional UV blocking substance and/or UV blocking particle is selected from the group consisting of particular titanium dioxide, zinc oxide, melanin, silicates, and Aerosils.
39. (Previously Presented) Composition according to claim 28, wherein it is present in the form of a lotion, cream, ointment, paste, stick, lipstick, or skin spray.
40. (Previously Presented) Composition according to claim 29, wherein it is present in the form of a shampoo, conditioner or aqueous or oily lotion.



41. (Previously Presented) Method according to claim 30, wherein the particles dispersed in an outer phase comprising water and applied directly as a dispersion onto the skin or mucous membranes.
42. (Currently Amended) Method of making a UV-protection composition comprising:

dispersing solid, polymorphic lipid particles in a medium, wherein the lipid particles that are crystalline or partially crystalline ~~and have a size below 5  $\mu$ m (average value of the main population)~~, optionally in the form of a solid inner phase (lipid phase) dispersed in an outer liquid phase, wherein the solid polymorphic particles have an endothermic peak above 20°C during the heating-up phase in heat calorimetry (DSC - differential scanning calorimetry) and have a size (average value of the main population) in the range of 10 nm to 1000 nm, and wherein the polymorphic particles comprise at least one selected from the group consisting of natural and synthetic mono-, di- und triglycerides, their mixtures, fatty alcohols, ethers of the same, individually or in a mixture, cetyl palmitate, glycerol monostearate, glycerol palmitostearate, glycerol ricinoleate, glycerol tribehenate (Compritol), glycerol trilaurate, hard fat (Witepsols), microcrystalline triglycerides (Dynasanes), and stearyl alcohol, individually or in a mixture.
43. (Previously Presented) Method according to claim 42, wherein the lipid particles are dispersed in an outer phase below its melting point using at least one selected from the group consisting of a rotor-stator colloid mill, a high-speed mixer, in particular a dissolver disk, a high pressure homogenizer, a piston-gap homogenizer and a Microfluidizer.
44. (Previously Presented) Method according to claim 42, wherein the lipid particles are dispersed in an outer phase below close to or above its melting point using at least one selected from the group consisting of a rotor-stator colloid mill, a high-speed mixer, in particular a dissolver disk, a high pressure

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homogenizer, a piston-gap homogenizer and a Microfluidizer.